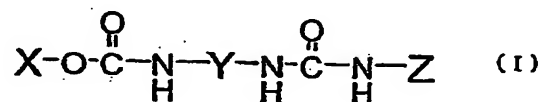
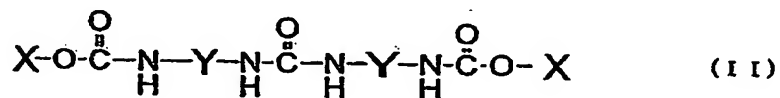


## CLAIMS

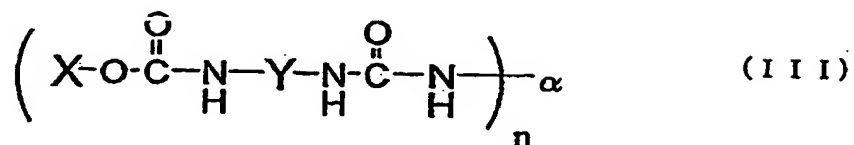
1. A composition used for preparation of a color development system, comprising a component (a) comprising at least one urea-urethane compound having one or more urea groups and one or more urethane groups in the same molecule, the component (a) being dispersed in a liquid medium and subjected to heat treatment.
2. The composition according to Claim 1, wherein the component (a) urea-urethane compound is at least one compound represented by any of the following formulas (I) to (VI):



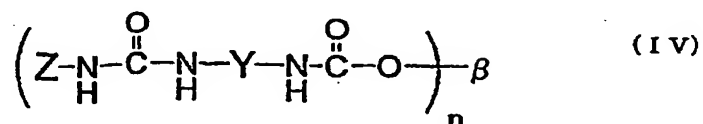
wherein each of X, Y, and Z represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue; and each residue may have a substituent;



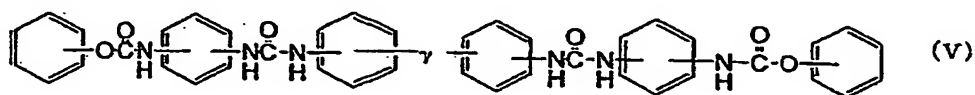
wherein each of X and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue; and each residue may have a substituent;



wherein each of X and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue,  $\alpha$  represents a residue having a valence of 2 or greater, n represents an integer of 2 or greater, and each residue may have a substituent;

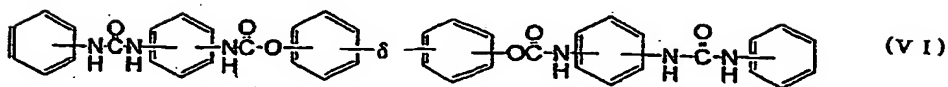
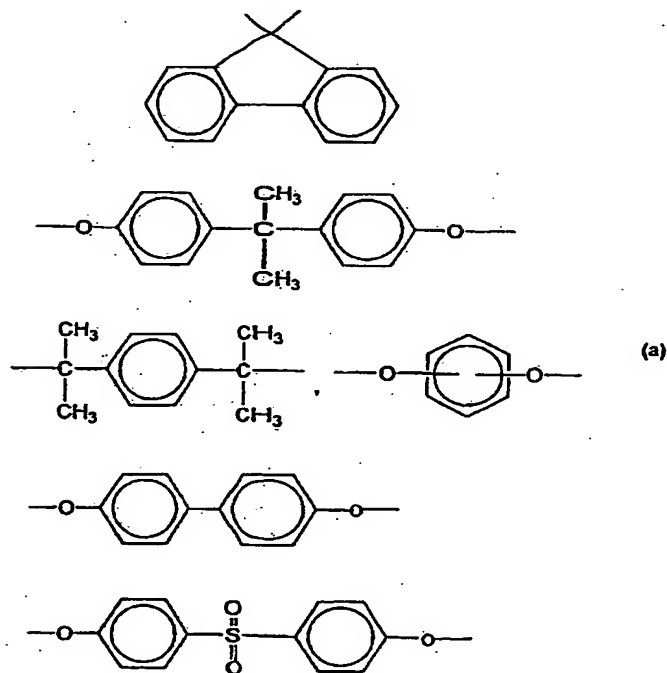


wherein each of Z and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue,  $\beta$  represents a residue having a valence of 2 or greater, n represents an integer of 2 or greater, and each residue may have a substituent;

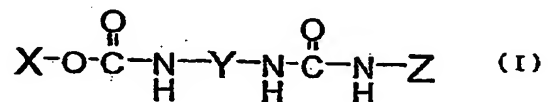


wherein a hydrogen atom on a benzene ring may be substituted with an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, each residue may have a substituent,  $\gamma$

wherein a hydrogen atom on a benzene ring may be substituted with an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, each residue may have a substituent,  $\delta$  represents any of  $-\text{SO}_2-$ ,  $-\text{O}-$ ,  $-(\text{S})_n-$ ,  $-(\text{CH}_2)_n-$ ,  $-\text{CO}-$ ,  $-\text{CONH}-$ ,  $-\text{NH}-$ ,  $-\text{CH}(\text{COOR}_1)-$ ,  $-\text{C}(\text{CF}_3)_2-$ ,  $-\text{CR}_2\text{R}_3-$  or a direct bond;  $\text{R}_1$ ,  $\text{R}_2$ , and  $\text{R}_3$  represent an alkyl group having 1 to 20 carbon atoms, and  $n$  is 1 or 2).

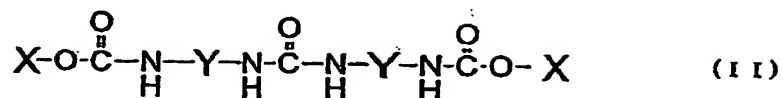


3. The composition according to Claim 1 or 2, comprising a dispersion obtained by dispersing the component (a) urea-urethane compound in a liquid medium and heating the mixture at 40°C or more.
4. A composition used for preparation of a color development system comprising a dispersion in which a component (a) comprising at least one urea-urethane compound having one or more urea groups and one or more urethane groups in the same molecule, and a coloring inhibitor component (b), which is at least one compound selected from a silicate, a carbonate, a sulfate, a phosphate, a metal oxide, a metal hydroxide, a hindered phenol compound, a hindered amine compound, and an acetoacetic acid derivative are dispersed in a liquid medium.
5. The composition according to Claim 4, which is obtained by subjecting at least one of the component (a) and the component (b) to heat treatment.
6. The composition according to Claim 4, wherein the component (a) urea-urethane compound is at least one compound represented by the following formulas (I) to (VI):

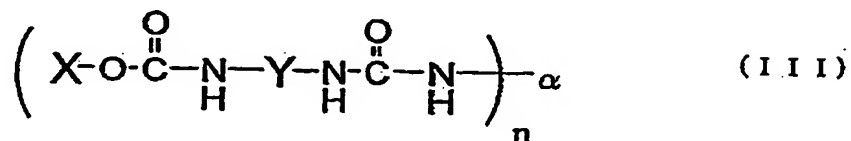


wherein each of X, Y, and Z represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, and each residue may

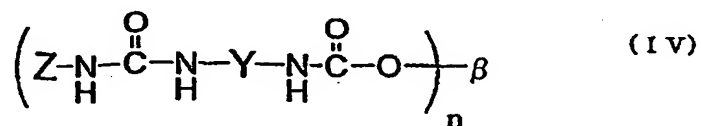
have a substituent;



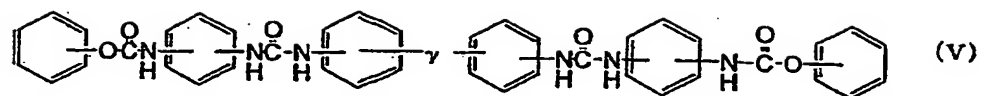
wherein each of X and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, and each residue may have a substituent;



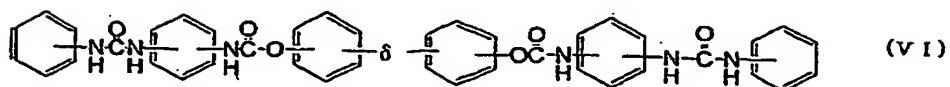
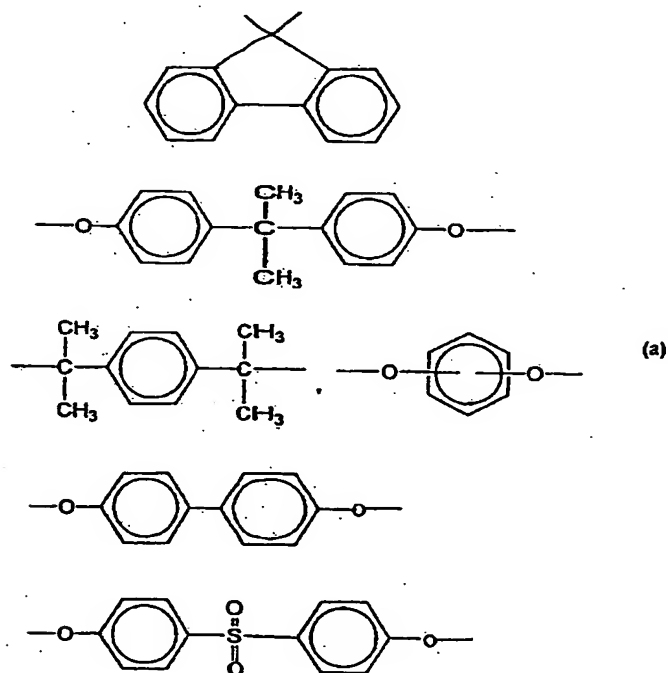
wherein each of X and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue,  $\alpha$  represents a residue having a valence of 2 or greater, n represents an integer of 2 or greater, and each residue may have a substituent;



wherein Z and Y represent an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue,  $\beta$  represents a residue having a valence of 2 or greater, n represents an integer of 2 or greater, and each residue may have a substituent;



wherein a hydrogen atom on a benzene ring may be substituted with an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, each residue may have a substituent,  $\gamma$  represents any of  $-\text{SO}_2-$ ,  $-\text{O}-$ ,  $-(\text{S})_n-$ ,  $-(\text{CH}_2)_n-$ ,  $-\text{CO}-$ ,  $-\text{CONH}-$ , a compound of any of the following formulas (a), or a direct bond, and n is 1 or 2; and



wherein a hydrogen atom on a benzene ring may be substituted with an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, each residue may have a substituent;  $\delta$  represents any of  $-\text{SO}_2-$ ,  $-\text{O}-$ ,  $-(\text{S})_n-$ ,  $-(\text{CH}_2)_n-$ ,  $-\text{CO}-$ ,  $-\text{CONH}-$ ,  $-\text{NH}-$ ,  $-\text{CH}(\text{COOR}_1)-$ ,  $-\text{C}(\text{CF}_3)_2-$ ,  $-\text{CR}_2\text{R}_3-$  or a direct bond,  $\text{R}_1$ ,  $\text{R}_2$ , and  $\text{R}_3$  represent an alkyl group having 1 to 20 carbon atoms, and  $n$  is 1 or 2.

7. The composition according to any one of Claims 4 to 6, wherein the component (b) coloring inhibitor is at least one member selected from magnesium silicate, calcium silicate, magnesium carbonate, calcium carbonate, calcium sulfate, magnesium phosphate, 2,2'-methylenebis(4,6-di-*t*-butylphenyl)sodium phosphate, magnesium oxide, aluminum oxide, titanium oxide, magnesium hydroxide, 1,1,3-tris(2-methyl-4-hydroxy-5-cycloheptylphenyl)butane, 1,1,3-tris(2-methyl-4-hydroxy-5-*t*-butylphenyl)butane, tris(2,6-dimethyl-4-*t*-butyl-3-hydroxybenzyl)isocyanurate, acetoacetic acid anilide, and acetoacetic acid *m*-xylylidide.

8. The composition according to any one of Claims 1 to 7, further comprising an acidic developer component (c) which is at least one compound selected from a phenol derivative, an aromatic carboxylic acid derivative or a metal salt compound thereof, a salicylic acid derivative or a metal salt compound thereof, an *N,N*-diarylthiourea derivative, and a

sulfonylurea derivative.

9. The composition according to Claim 8, wherein the phenol derivative of the acidic developer component (c) is at least one member selected from 2,2-bis(4-hydroxyphenyl)propane, bis(4-hydroxyphenyl) sulfone, 4-isopropoxyphenyl-4'-hydroxyphenylsulfone, 2,4'-dihydroxydiphenylsulfone, bis(3-allyl-4-hydroxyphenyl) sulfone, and benzyl 4-hydroxybenzoate.

10. The composition according to any one of Claims 4 to 9, comprising a dispersion obtained by dispersing the component (a) urea-urethane compound in a liquid medium and heating the mixture at 40°C or more.

11. The composition according to any one of Claims 4 to 10, comprising a dispersion be obtained by dispersing the coloring inhibitor component (b) in a liquid medium and heating the mixture at 40°C or more.

12. The composition according to any one of Claims 4 to 11, comprising a dispersion obtained by dispersing the component (a) urea-urethane compound in a liquid medium and heating the mixture at 40°C or more, and a dispersion obtained by dispersing the coloring inhibitor component (b) in a liquid medium and heating the mixture at 40°C or more.

13. The composition according to any one of Claims 4 to 12, wherein the content of the coloring inhibitor component (b) is 1 part by mass or more and less than 50 parts by mass per 100 parts by mass of the urea-urethane compound component (a).



14. The composition according to any one of Claims 1 to 13, wherein the urea-urethane compound component (a) and/or the coloring inhibitor component (b) are dispersed using at least one dispersant selected from the group consisting of a nonionic water-soluble polymer compound, an anionic water-soluble polymer compound, an anionic surfactant, a nonionic surfactant and an amphoteric surfactant.
15. The composition according to Claim 14, wherein the urea-urethane compound component (a) and/or the coloring inhibitor component (b) are dispersed using at least one dispersant selected from the group consisting of a nonionic or anionic water-soluble polymer compound selected from a polyvinyl alcohol derivative and a cellulose derivative, and an anionic surfactant.
16. The composition according to Claim 15, wherein the polyvinyl alcohol derivative is sulfonic acid-modified polyvinyl alcohol, the cellulose derivative is hydroxypropylmethyl cellulose and the anionic surfactant is at least one member selected from a metal salt of  $\beta$  naphthalenesulfonic acid formalin condensate and a polycarboxylic acid derivative surfactant.
17. A recording material comprising a color development layer containing a composition according to any one of Claims 1 to 16 arranged on a substrate.
18. The recording material according to Claim 17,

wherein the recording material is a thermal recording material.